



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,367	07/18/2000	Stan Jirman	APLE.P0005	8886
62224	7590	07/13/2006	EXAMINER	
SLATTLER, JOHANSEN, AND ADELI LLP			CAO, DIEM K	
1875 CENTURY PARK EAST			ART UNIT	
SUITE 1360			PAPER NUMBER	
LOS ANGELES, CA 90067			2194	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,367

Applicant(s)

JIRMAN ET AL.

Examiner

Diem K. Cao

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/30/2006.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-38 are pending. Applicant has amended claims 1, 10, 19, 23, 29, 30 and 38.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 10 and 13 rejected under 35 U.S.C. 102(e) as being anticipated by Niemi et al (U.S. 6,470,388).**

As to claim 10, Niemi teaches a system comprising:

- a foundational layer (logging service layer 316, 318, network communication facility 332, 334, and centralized logger 236) upon which applications (network management applications 208a, 208b) are built and executed (fig. 3); and
- an event logging mechanism (logging service layer 316, 318, and centralized logger 236) executing independent of said applications [It is noted that getting debug objects or states does not involve actions of an application program, col. 14, lines 46-63; col. 15, lines 43-48], said mechanism for generating an event log (record or data entry 514) for any of said applications without referencing any event logs of said applications [it is noted that the production of record 514 does not reference any event logs of the applications]. See col. 11, line

Art Unit: 2194

53 – col. 12, line 61. The logging mechanism for turning on or off at any time during the execution of the applications by an entity external to the applications (Modifying Debug States; col. 14, lines 1-5).

As to claim 13, Niemi teaches the foundational layer includes a programmable framework (libraries to implement logging service layer, col. 6, lines 55-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 23, 24 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388).

As to claim 12, Niemi teaches the foundational layer includes network communication functionality (332, 334) which is typically provided by an operating system. Therefore, it would have been obvious to include an operating system into the foundational layer of Niemi.

As to claim 23, Niemi teaches a system comprising:

- a foundational layer (logging service layer 316, 318, network communication facility 332, 334, and centralized logger 236) upon which applications (network management applications 208a, 208b) are executed (fig. 3; col. 11, line 53 – col. 12, line 61),

- a first application (network management applications 208a, 208b) for executing on said foundational layer (fig. 3),

- a second application (network management applications 208a, 208b) for executing on said foundational layer (fig. 3),

- a third event-logging application for execution on said foundational layer (application with enabled debug object)

- an event logging mechanism (logging service layer 316, 318, and centralized logger 236), for functioning interoperably with (enable/disable state of a debug object) but separately (separate address spaces, fig. 3) from said first and second applications, and for generating an event log (log file 506 containing records 514) for either of said first and second applications (application with its corresponding debug object enabled), wherein the event-logging mechanism is separate from the first and second applications and is not compiled with the applications (See Fig. 2 and associated text). See col. 8, lines 11-43; col. 11, line 1 – col. 12, line 29.

Niemi teaches only when an application's debug object is enabled, the application's event data is logged, generating an event log. Col. 8, lines 11-43; col. 11, line 1 – col. 12, line 29.

Therefore, it would have been obvious that in Niemi at least one of said first and second applications does not generate an event log, i.e., when its debug object is not enabled.

Art Unit: 2194

As to claim 24, Niemi teaches storing, for each event to be logged, a temporal attribute (time stamp 516) of the event in the event object (record 514) associated with the event. See fig. 5 and denoting text.

As to claim 26, Niemi teaches a first area of memory allocated to the first application, a second area of memory allocated to the second application, and a third area of memory allocated to the event logging mechanism, wherein the third area of memory is separate from the areas of memory allocated to the first and second applications (separate address spaces; see Fig. 3 and associated text).

As to claim 27, Niemi teaches an enable/disable state for each event identified by the application wherein the disable state precludes any system from creating an event log (col. 11, lines 45-65).

As to claim 28, Niemi teaches generating an event log is performed for each event having event logging enabled (col. 11, lines 45-65).

As to claim 29, see rejection of claim 12 above.

6. Claims 1-3, 11, 14, 19, 21, 30-32 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388) in view of Ladwig (U.S. 2002/0138663 A1).

As to claim 11, Niemi teaches the event logging mechanism logs time (time stamp 516) and other event information (fields 518, 520, 522, 524) into an event object (record or data entry 514) for every event to be logged. Col. 12, lines 11-15.

Niemi does not teach logging start time and end time. Ladwig teaches for every event, logging start time (Datetime; page 4, section 0054) and duration time (Duration; page 4, section 0058) for each event. Although Ladwig does not teach the end time, it would have been obvious one of ordinary skill in the art could store the end time instead of duration time for the event.

One of ordinary skill in the art would have been motivated to combine the teachings of Niemi and Ladwig because this would allowed customization of event logging and analysis for each application of Niemi.

As to claim 14, Niemi teaches the event logging mechanism can be turned on (set state of the debug object to disabled) and then off (set state of the debug object to disabled) from beyond the execution space of said applications within said foundation layer (from centralized logging facility). See col. 11, lines 24-44; col. 14, lines 1-45).

As to claim 21, Niemi teaches an apparatus comprising:

- means for creating (logging service layer 316, 318, network communication facility 332, 334, and centralized logger 236), for every event (event) to be logged that has not been logged [it is noted that Niemi does not disclose a prior logging step] within an application

Art Unit: 2194

(application 208a, 208b), an event object (record 514), said event object occupying a memory space (database 504 / log file 506) (col. 12, lines 8-15);

- means for logging (logging service layer 316, 318, and centralized logger 236) within said event object (record 514) the time (time stamp 516) and other event information (fields 518, 520, 522, 524) (col. 12, lines 11-15), wherein the creating and the logging are performed on a single computer on which the application executed (col. 15, lines 60-63).

Niemi does not teach logging start time and end time. Ladwig teaches for every event, logging start time (Datetime; page 4, section 0054) and duration time (Duration; page 4, section 0058) for each event. Although Ladwig does not teach the end time, it would have been obvious one of ordinary skill in the art could store the end time instead of duration time for the event.

One of ordinary skill in the art would have been motivated to combine the teachings of Niemi and Ladwig because this would allowed customization of event logging and analysis for each application of Niemi.

Regarding the event object executing independent of said application, in Niemi, the event logging mechanism (logging service layer 316, 318, and centralized logger 236) executes independent of the applications [It is noted that getting debug objects or states does not involve actions of an application program, col. 14, lines 46-63; col. 15, lines 43-48].

As to claim 1, it is a method claim of claim 21, and thus note claim 21 for discussion.

As to claims 2, 3, Niemi teaches checking, for each event identified by the application, whether event logging has been turned on (issue GetState() on debug object), creating and

Art Unit: 2194

logging are performed for each event having event logging turned on (perform logging if state of the debug object is enabled), wherein a plurality of event objects are created (record 514) and logged (log file 516) for a plurality of events (402, 404, 406, 408). See col. 8, lines 9-42; col. 11, line 66 – col. 12, line 15.

As to claim 19, it is a program product claim of claim 1, thus note claim 1 for discussion.

As to claim 30, it is the same as the method claim of claim 1 and is rejected under the same ground of rejection. Further see Fig. 3 and associated text.

As to claim 31, see rejection of claim 27 above.

As to claim 32, see rejection of claim 2 above.

As to claim 34, Niemi teaches the memory space occupied by the event log is within memory space that has been allocated solely to the event logging mechanism (central logging facility; see Fig. 2 and associated text).

As to claim 35, Niemi teaches the events that are logged by the event logging mechanism have not been previously logged by any other application (see rejection of claim 21 above regarding this limitation).

As to claim 36, Niemi teaches the information placed in the event log is first logged by the event logging mechanism (see rejection of claim 21 above regarding this limitation)

As to claim 37, see rejection of claim 27 above.

As to claim 38, see rejection of claim 13 above.

7. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388) in view of Nock (U.S. 6,144,967).

As to claim 15, Nock teaches turning on/off and configuring the event logging mechanism via a user interface (framework user initiates log analysis procedure via user interface, col. 15, lines 54-67). Therefore, it would have been obvious to turn on/off and configure the event logging mechanism via a user interface in Niemi. Browser is a well-known type of user interface. Therefore, it would have been obvious to use a browser to implement the user interface of Nock. Note discussion of claim 11 for a motivation to combine.

As to claim 16, Niemi teaches the event logging mechanism generates a plurality of event objects (plurality of records 514 in log file 506, fig. 5) and is configured to analyze the event objects (access and review contents of log file) and present to the results via the user interface (fig. 6). See col. 13, lines 2-15. Note discussion of claim 15 for using a browser to implement the user interface.

8. Claims 17-18, 20, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388) in view of Nock (U.S. 6,144,967) further in view of Ben-Natan et al (U.S. 5,740,354).

As to claims 17, 18, Niemi as modified by Nock teaches (Nock) analyzing event objects based upon hierarchical grouping (perform_analysis() at log section or log levels, fig.s 17, 19 and denoting text) and aggregating event objects deemed identical based upon hierarchical grouping (multiple (0...n) log section objects, fig. 14 and denoting text).

Niemi as modified by Nock does not teach contextual grouping of events. Ben-Natan teaches processing logged event data, including analyzing event data based on contextual grouping (related errors). See col. 14, lines 2-10. Therefore, it would have been obvious to analyze event objects/data based on contextual grouping in Niemi as modified.

One of ordinary skill in the art would have been motivated to combine the teachings of Niemi as modified and Ben-Natan because this would have provided users of Niemi better understanding of events/errors via association. (Ben-Natan, col. 3, line 37 – col. 4, line 14).

As to claims 20, 22, 25, note the discussion of claim 17.

9. Claims 4 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388) in view of Ladwig (U.S. 2002/0138663 A1) further in view of Sato (U.S. 5,819,094).

As to claim 4, Sato teaches event logging and analysis, including analyzing event objects after event logging is turned off in that a user analyzes the log data contained within the history diagram, after program execution, and thus recording of the log data / history diagram, are completed (Col. 2, lines 43-56; col. 9, lines 18-57). Therefore, it would have been obvious to analyze event objects after event logging is turned off in Niemi as modified. One of ordinary skill in the art would have been motivated to combine the teachings of Niemi as modified and Sato because this would have enhanced log analysis by using visual manipulation of the log data. (Sato, col. 3, lines 6-13).

As to claim 33, see rejection of claim 4 above.

10. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemi et al (U.S. 6,470,388) in view of Ladwig (U.S. 2002/0138663 A1) and Sato (U.S. 5,819,094) further in view of Nock (U.S. 6,144,967).

As to claim 5, see rejection of claim 17 above.

As to claim 6, see rejection of claim 18 above.

As to claim 7, Nock teaches traversing through the hierarchy of subgroups until the subgroup of finest granularity is traversed, subdividing the events into further subgroups,

Art Unit: 2194

computing statistics for each subgroup while traversing, and displaying the statistics (col. 14, line 49 – col. 15, line 2 and col. 16, line 30 – col. 17, line 14).

As to claims 8-9, see rejections of claim 17, 18 and 7 above.

Response to Arguments

11. Applicant's arguments filed 4/7/2006 have been fully considered but they are not persuasive.

As to Applicant's arguments regarding Niemi does not teach that the record 514 is not on a single computer where both creating the event object and logging operations are performed on which the application executes, and similar arguments, those are newly added and are taught by Niemi (see rejections of claims above). Thus, the arguments are not persuasive.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2194


however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 730AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Diem Cao


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER